F24C

OTHER DOMESTIC STOVES OR RANGES; DETAILS OF DOMESTIC STOVES OR RANGES, OF GENERAL APPLICATION (radiator stoves of the fluid-circulating type F24H)

Definition statement

This subclass/group covers:

Domestic stoves or ranges in which the fuel is not restricted to solid fuel, e.g. gaseous fuels, liquid fuels or electricity is used.

Details for such stoves or ranges.

Cooktops.

Devices for removing cooking fumes, e.g. extractor hoods.

Baking ovens with convection heat.

Relationship between large subject matter areas

Stoves or ranges for solid fuels are classified in <u>F24B</u>.

References relevant to classification in this subclass

This subclass/group does not cover:

Microwave ovens	H05B 6/64
Induction cooktops are classified	H05B 6/12
Artificial fireplaces or stoves comprising means to simulate flames or the burning of solid fuel using gaseous fuel	F24C 3/006
Eelectrical powered artificial fireplaces or stoves comprising means to simulate flames or the burning of solid fuel	F24C 7/004
Aspects concerning the housing of artificial fireplaces	F24B 1/1808

Attention is drawn to the following places, which may be of interest for search:

Bakers' ovens; machines or equipment for baking	<u>A21B</u>
Kitchen cabinets	A47B 77/00
Washing or rinsing machines for crockery or tableware	<u>A47L 15/00</u>
Laundering, drying, ironing, pressing or folding textile articles	<u>D06F</u>
Burners	<u>F23D</u>
Fluid heaters, e.g. water or air heaters, having heat generating means	<u>F24H</u>
Refrigerators	<u>F25D</u>

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Stove	appliance used for generating heat
Range, kitchen stove, cooking stove, cookstove or cooker	kitchen appliance designed to cook food. Such a device has both burners on the top (also known in American English as the cooktop and, in British English, the hob) and, often, an oven
Cooktop	has burners on the top and is usually installed into a countertop
Drop-in range	has both burners on the top and an oven and hangs from a cutout in the countertop (that is, it cannot be installed free-standing on its own)

Stoves or ranges in which the fuel or energy supply is not restricted to solid fuel or to a type covered by a single one of the following groups <u>F24C 3/00</u> to <u>F24C 9/00</u>; Stoves or ranges in which the type of fuel or energy supply is not specified

Definition statement

This subclass/group covers:

Stoves or ranges which are adapted for the use of two or more kinds of fuel or energy supply.

Stoves or ranges solely adapted for radiation heating.

F24C 3/00

Stoves and ranges for gaseous fuels

Definition statement

This subclass/group covers:

Stoves or ranges comprising a gas burner.

Details of such stoves or ranges, e.g. the arrangement or mounting of the burners, the arrangement or mounting of ignition devices and control or safety devices used on these devices.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Control valves	<u>F16K</u>
Premix gas burners with radial outlets at the burning head	F23D 14/06
Regulating or controlling combustion	<u>F23N</u>
Ignition	<u>F23Q</u>

F24C 5/00

Stoves and ranges for liquid fuels

Definition statement

This subclass/group covers:

Stoves and ranges using liquid fuel.

Details of such stoves or ranges, e.g. the arrangement or mounting of the burners, the arrangement or mounting of ignition devices and control or safety devices used on these devices.

Liquid-fuel supply arrangements.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Burners for combustion of a liquid	<u>F23D</u>
Feeding fuel to combustion apparatus	<u>F23K</u>
Regulating or controlling combustion	<u>F23N</u>
Ignition	<u>F23Q</u>

F24C 7/00

Stoves or ranges heated by electrical energy (electric heating elements or arrangements <u>H05B</u>)

Definition statement

This subclass/group covers:

Stoves and ranges using electrical energy.

Details of such stoves or ranges, e.g. the arrangement or mounting of the heating elements, the arrangement or mounting of control or safety devices used on these devices.

References relevant to classification in this group

This subclass/group does not cover:

Cooking devices using induction heating	H05B 6/12
Heating using microwaves	<u>H05B 6/64</u>

F24C 7/004

[N: simulating flames]

Informative references

Attention is drawn to the following places, which may be of interest for search:

Lighting devices or systems simulating flames	F21S 10/04
Simulated fireplace	F24B 1/1808
Artificual stove with gaseous fuel	F24C 3/006

F24C 7/02

using microwaves (heating using microwaves in general <u>H05B</u> <u>6/64</u>)

Special rules of classification within this group

F24C 7/02 is not used anymore for classification, use H05B 6/64.

F24C 7/08

Arrangement or mounting of control or safety devices (switches <u>H01H</u>; circuit arrangements for electric heating <u>H05B</u>)

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring temperature; measuring quantity of heat; thermally-sensitve elements not otherwise provided for	<u>G01K</u>
Controlling members, e.g. knobs or handles;	<u>G05G 1/00</u>
Touch switches	H03K 17/96

F24C 9/00

Stoves or ranges heated by a single type of energy supply not

covered by groups <u>F24C 3/00</u> to <u>F24C 7/00</u> or <u>F24B</u> (using the heat from an exothermal reaction not involving a supply of free oxygen gas, [N: using special gaseous fuel e.g. acetylene, hydrogen,] using solar energy <u>F24J</u>)

Definition statement

This subclass/group covers:

Stoves or ranges using the heat from an exothermal reaction not involving a supply of free oxygen gas, using special gaseous fuel e.g. acetylene, hydrogen.

References relevant to classification in this group

This subclass/group does not cover:

Solar heat collectors with supports for article heated, e.g. stoves, ranges crucibles, furnaces or ovens using solar heat	F24J 2/02
Solai Hoat	

F24C 11/00

Combinations of two or more stoves or ranges, e.g. each having a different kind of energy supply

Definition statement

This subclass/group covers:

Combinations of two or more stoves or ranges, e.g. each having a different kind of energy supply.

F24C 13/00

Stoves or ranges with additional provisions for heating water (mounting arrangements of water heaters or water-heating elements F24H1/04)

Definition statement

This subclass/group covers:

Stoves or range wherein residual heat is used for heating water.

Informative references

Mounting arrangements of water heaters or water-heating elements	F24H1/04

F24C 14/00

Stoves or ranges having self-cleaning provisions, e.g. continuous or catalytic cleaning, electrostatic cleaning

Definition statement

This subclass/group covers:

Pyrolytic cooking ovens.

Stoves or ranges wherein a cleaning liquid is used.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cleaning in general; prevention of fouling	<u>B08B</u>
Detergent compositions	<u>C11D</u>
Removing cooking fumes	F24C 15/20

F24C 15/00

Details

Definition statement

This subclass/group covers:

Details of stoves or ranges such as: arrangements for circulation of cooling air to avoid excessive heat in the housing or door, illumination of oven cavities, doors specially adapted for stoves or ranges, shelves or racks used in cooking ovens.

Cooking hot plate using gas or electrical energy.

Devices for removing cooking fumes, either from a cooking cavity or from a cooking area, e.g. extractor hoods.

Arrangements of ducts for hot gases in or around baking ovens, e.g. convection baking ovens.

[N: Coatings for ovens]

Informative references

Attention is drawn to the following places, which may be of interest for search:

Enamels; Glazes	C03C 8/00

F24C 15/008

[N: Illumination for oven cavities]

Informative references

Attention is drawn to the following places, which may be of interest for search:

Means for illuminating ovens	<u>A21B 3/10</u>
Lighting devices inside a domestic oven	F21S8/00F
Details of lighting of general application	<u>F21V</u>
Lighting devices in microwave cavity	H05B 6/6444
Lighting for ovens	F21W 2131/307

F24C 15/02

Doors specially adapted for stoves or ranges (in general <u>E06B</u>; for combustion chambers <u>F23M</u>)

Informative references

Locks; accessories therefore; handcuffs	<u>E05B</u>
Hinges or other suspension devices for doors	<u>E05D</u>

Sealing arrangements on wings or parts co-operating with the wings	E06B 7/16
Sealings	<u>F16J 15/00</u>

Tops, e.g. hot plate; Rings (F24C 15/12, F24C 15/14 take precedence)

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devitrified glass ceramics	C03C 10/00
Surface treatment of glass, not in the form of fibres or filaments, by coating	C03C 17/00
Ohmic resistance heating arrangements specially adapted for cooking plates or analogous hot-plates	H05B 3/68
Induction cooking plates with coil cooling arrangements	H05B 6/1263

F24C 15/16

Shelves, racks, [N: rotisserie spits,] or trays inside ovens; Supports therefor

Informative references

Sliding drawers for tables, cabinets or like furniture	A47B 88/04
Roasting apparatus with movably-mounted food supports or with movable heating implements; spits	<u>A47J 37/04</u>

Roasters; grills; sandwich grills	<u>A47J 37/06</u>
Racks for washing or rinsing machines for crockery or tableware	A47L 15/50
Bearings for parts moving only linearly	F16C 29/00
Shelves in refrigerators	F25D 25/02

Removing cooking fumes (parts, details or accessories of cooking-vessels for withdrawing or condensing cooking vapours from such vessels <u>A47J 36/38</u>)

Definition statement

This subclass/group covers:

Devices for removing cooking fumes from cooking cavities or from cooking ranges, e.g. using an extractor hood.

Informative references

Parts, detail or accessories of cooking-vessels for withdrawing or condensing cooking vapour from cooking utensils	A47J 36/38
Control of fire-fighting equipment	A62C 37/00
Separating dispersed particles from gases or vapours by gravity, inertia or centrifugal forces	B01D 45/00
Filters or filtering processes specially modified for separating dispersed particles from gases or vapours	B01D 46/00
Air-conditioning; air-humidification; ventilation	<u>F24F</u>
Microwave oven air circulation system also used as air extracting hood	<u>H05B 6/6423</u> 10

Arrangements for mounting stoves or ranges in particular locations

Informative references

Attention is drawn to the following places, which may be of interest for search:

Kitchen cabinets incorporating	A47B 77/08
apparatus operated by power	

F24C 15/32

Arrangements of ducts for hot gases, e.g. in or around baking ovens

Definition statement

This subclass/group covers:

Baking ovens comprising convection heating using forced circulation.

Baking ovens comprising air moisturising means, e.g. steam ovens.

Informative references

Ovens heated by media flowing there through	A21B 1/24
Air-treatment devices for ovens, e.g. regulating humidity	A21B 3/04
Steam-heated kettles for domestic use	<u>A47J 27/06</u>
Heat-insulated warming chambers with forced air circulation	A47J 39/003
Heating using microwaves combined with convection heating and using steam	H05B 6/6479